

09/17/97

13

Page 1 of 3

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary)	ATTY. DOCKET NO. ARCD:177/WIM	SERIAL NO. 08/455,683
	APPLICANT: Graeme I. Bell et al.	
	FILING DATE May 31, 1995	GROUP Unknown

U.S. PATENT DOCUMENTS

EXAM. INIT.	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAM. INIT.	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
SPT	B1	WO 94/11500	05/26/94	PCT			

OTHER ART (Author, Title, Journal, Volume, Pertinent Pages, & Date)

SPT	C1	Dohlman et al., "Model Systems for the Study of Seven-Transmembrane-Segment Receptors," <i>Annu. Rev. Biochem.</i> , 60:653-688, 1991.					
SPT	C2	Dohlman et al., "A Family of Receptors Coupled to Guanine Nucleotide Regulatory Proteins," <i>Biochemistry</i> , 26:2657-2664, 1987.					
SPT	C3	Evans et al., "Cloning of a Delta Opioid Receptor by Functional Expression," <i>Science</i> , 258:1952-1954, 1992.					
SPT	C4	Frielle et al., "Structural Basis of β -adrenergic Receptor Subtype Specificity Studied with Chimeric $\beta 1/\beta 2$ -adrenergic Receptors," <i>Proc. Natl. Acad. Sci. USA</i> , 85:9494-9498, 1988.					
SPT	C5	Gioannini, T.L. et al., "Evidence for the Presence of Disulfide Bridges in Opioid Receptors Essential for Ligand Binding. Possible Role in Receptor Activation," <i>J. Mol. Recogn.</i> , 2:44-48, 1989.					
SPT	C6	Kieffer et al., "The δ -opioid Receptor: Isolation of a cDNA by Expression Cloning and Pharmacological Characterization," <i>Proc. Natl. Acad. Sci. USA</i> , 89:12048-12052, 1992.					
SPT	C7	Loh et al., "Molecular Characterization of Opioid Receptors," <i>Annu. Rev. Pharmacol. Toxicol.</i> , 30:123-147, 1990.					
SPT	C8	Lutz et al., "Opioid Receptors and Their Pharmacological Profiles," <i>J. Receptor Res.</i> , 12:267-286, 1992.					

EXAMINER <i>Sally Tene</i>	DATE CONSIDERED <i>10/24/97</i>
----------------------------	---------------------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (modified)List of Patents and Publications
For Applicant's Information
Disclosure Statement

(Use several sheets if necessary)

ATTY. DOCKET NO.
ARCD:177/WIMSERIAL NO.
08/455,683APPLICANT:
Graeme I. Bell et al.FILING DATE
May 31, 1995GROUP
Unknown**U.S. PATENT DOCUMENTS**

EXAM. INIT.	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAM. INIT.	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
<i>SP</i>	B2	0 612 845 A3	08-31-94	EPO	C12N	15/42	

OTHER ART (Author, Title, Journal, Volume, Pertinent Pages, & Date)

<i>SP</i>	C9	Mansour et al., "Anatomy of CNS Opioid Receptors," <i>Trends in Neurosci.</i> , 7:2445-2453, 1987.
<i>SP</i>	C10	Nock et al., "Autoradiography of [3H]U-69593 Binding Sites in Rat Brain: Evidence for K Opioid Receptor Subtypes," <i>Eur. J. Pharmacol.</i> , 154:27-34, 1988.
<i>SP</i>	C11	Simon, "Opioid Receptors and Endogenous Opioid Peptides," <i>Medicinal Res. Rev.</i> , 11:357-374, 1991.
<i>SP</i>	C12	Unterwald et al., "Neuroanatomical Localization of K1 and K2 Opioid Receptors in Rat and Guinea Pig Brain," <i>Brain Res.</i> , 562:57-65, 1991.
<i>SP</i>	C13	Xie et al., "Expression Cloning of cDNA Encoding a Seven-helix Receptor from Human Placenta with Affinity for Opioid Ligands," <i>Proc. Natl. Acad. Sci. USA</i> , 89:4124-4128, 1992.
<i>SP</i>	C14	Yamada et al., "Cloning and Functional Characterization of a Family of Human and Mouse Somatostatin Receptors Expressed in Brain, Gastrointestinal Tract, and Kidney," <i>Proc. Natl. Acad. Sci. USA</i> , 89:251-255, 1992.
<i>SP</i>	C15	Yasuda et al., "Cloning of a Novel Somatostatin Receptor, SSTR3, Coupled to Adenylylcyclase," <i>J. Biol. Chem.</i> , 267:20422-20428, 1992.
<i>SP</i>	C16	Schofield et al., "Molecular Characterization of a New Immunoglobulin Superfamily Protein with Potential Roles in Opioid Binding and Cell Contact," <i>The EMBO Journal</i> , 8:489-495, 1989.

EXAMINER

Bally King

DATE CONSIDERED

10/24/97

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (modified)List of Patents and Publications
For Applicant's Information
Disclosure Statement

(Use several sheets if necessary)

ATTY. DOCKET NO.
ARCD:177/WIMSERIAL NO.
08/455,683APPLICANT:
Graeme I. Bell et al.FILING DATE
May 31, 1995GROUP
Unknown**U.S. PATENT DOCUMENTS**

EXAM. INIT.	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAM. INIT.	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
SP1	B3	WO 94/04552	03-03-94	PCT	C07H	21/04	
SP1	B4	WO 93/19086	09-30-93	PCT	C07K	3/18	

OTHER ART (Author, Title, Journal, Volume, Pertinent Pages, & Date)

SP1	C17	Probst et al., "Sequence Alignment of the G-Protein Coupled Receptor Superfamily," <i>DNA and Cell Biology</i> , 11:1-20, 1992.
SP1	C18	Dialog Search Report, pp. 1-14, printed May 24, 1994.
SP1	C19	Fujioka et al., "Purification and Reconstitution of μ -opioid Receptors in Liposome," <i>Journal of Chromatography</i> , 597:429-433, 1992.
SP1	C20	Miller et al., "Reversed-phase Liquid Chromatographic Purification and Isolation of a Radio-iodinated Selective Probe for Mu Opioid Receptors in the Brain," <i>Journal of Neuroscience Methods</i> , 41:93-99, 1992.
SP1	C21	Shimizu, Masayoshi, "Isolation and Purification of Mu-type Opioid Receptor from Rat Brain using HPLC, and Biochemical Properties of Partially Purified Opioid Binding Protein," <i>Acta Scholae Medicinalis Universitatis in Gifu</i> , 35:88-110, 1987.
SP1	C22	Simon et al., "Purification of a Kappa-opioid Receptor Subtype from Frog Brain," <i>Neuropeptides</i> , 10(1):19-28, 1987.
SP1	C23	Ueda and Satoh, " μ -Opioid Receptor: Purification and Reconstitution with GTP-Binding Protein," <i>Receptor Purification</i> , 1:115-129, 1990.
SP1	C24	PCT Search Report mailed April 4, 1995.

EXAMINER

Fally Teng

DATE CONSIDERED

10/24/97

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Form PTO-1449 (modified)

List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No.

ARCD:177/WIM

Serial No.

08/455,683

Applicant

Bell et al.

Filing Date:

May 31, 1995

Group:

1812

U.S. Patent Documents

See Page 1

Foreign Patent Documents

See Page 1

Other Art

See Page 1

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
SPT	C25	Declaration of Terry Reisine, Ph.D.
SPT	C26	Kong, et al., "A Single Residue, Aspartic Acid 95, in the δ Opioid Receptor Specifies Selective High Affinity Agonist Binding," <i>J. Biol. Chem.</i> , 268(31):23055-23058 (1993).
SPT	C27	Raynor, et al., "Molecular Mechanisms of Agonist-Induced Desensitization of the Cloned Mouse Kappa Opioid Receptor," <i>J. Pharmacol. Exp. Ther.</i> , 270(3):1381-1386 (1994).
SPT	C28	Bot et al., "Mutagenesis of the Mouse δ Opioid Receptor Converts (-)Buprenorphine From a Partial Agonist to an Antagonist," <i>J. Pharmacol. Exp. Ther.</i> , accepted for publication.
SPT	C29	Blake, et al., "Differential Agonist Regulation of the Human κ -Opioid Receptor," <i>J. Neurochem.</i> , 68(5):1846-1852 (1997).
SPT	C30	Dawson et al., "Chronic Exposure to κ -Opioids Enhances the Susceptibility of Immortalized Neurons (F-11k7) to Apoptosis-Inducing Drugs by a Mechanism that May Involve Ceramide," <i>J. Neurochem.</i> 68:2363-2370 (1997).
SPT	C31	Tallent et al., "Differential Regulation of the Cloned Kappa and Mu Opioid Receptors," submitted for publication.
SPT	C32	Livingston et al., "Aspartate 128 in the Third Transmembrane Spanning Region of the Cloned Mouse Delta Opioid Receptor is Necessary for Agonist Binding," initial manuscript submitted for publication.

EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

Form PTO-1449 (modified)		Atty. Docket No. ARCD:177/WIM	Serial No. 08/455,683
List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicant Bell et al.	
		Filing Date: May 31, 1995	Group: 1812
U.S. Patent Documents See Page 1	Foreign Patent Documents See Page 1	Other Art See Page 1	

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
<i>SPT</i>	C33	Livingston <i>et al.</i> , "Aspartate 128 in the Third Transmembrane Spanning Region of the Cloned Mouse <i>Delta</i> Opioid Receptor is Necessary for Agonist Binding," revised manuscript submitted for publication.
<i>SPT</i>	C34	Befort <i>et al.</i> , "The Conserved Aspartate Residue in the Third Putative Transmembrane Domain of the δ -Opioid Receptor Is Not the Anionic Counterpart for Cationic Opiate Binding But Is a Constituent of the Receptor Binding Site," <i>Mol. Pharmacol.</i> 49:216-223 (1996).
<i>SPT</i>	C35	Bot <i>et al.</i> , "Opioid Regulation of the Mouse δ -Opioid Receptor Expressed in Human Embryonic Kidney 293 Cells," <i>Mol. Pharmacol.</i> 52:272-281 (1997).
<i>SPT</i>	C36	Xue and Liu-Chen, "Differential Binding Domains of Peptide and Non-peptide Ligands in the Cloned Rat κ Opioid Receptor," <i>J. Biol. Chem.</i> 269:30195-30199 (1994).

EXAMINER: <i>Duffy-Jung</i>	DATE CONSIDERED: <i>10/24/97</i>
EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)